

Distance Support



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What is Distance Support...

“Combination of process and technology that provides the transfer of data, information and knowledge at the right time to the right people at the right place that significantly improves the productivity of the Sailor and Marine and the mission readiness of Naval Forces.”

**Shipboard, Ship to Shore, Ship to Ship,
and Shore to Shore**

Fleet Distance Support Guidance

- CFFC/CPFC message set direction for “DS of the future to encompass personnel, training, logistics, maintenance, and quality of service support into a single, shore-based architecture.”
 - Identified DS as an essential enabler of our future navy to :
 - “...operate at sea with fewer sailors,
 - improve business efficiency,
 - shape tomorrows infrastructure,
 - help deliver Sea Warrior.”
 - Established an Executive Steering Committee (DS ESC) and Technical Advisory Group (DSTAG) to
 - “...develop collaborative governance,
 - capabilities description and
 - articulation plans.”

“021912Z NOV 04 COMFLTFORCOM NORFOLK VA”

Distance Support Guidance

- COMNAVNETWARCOM message for deployment of NKO Afloat
 - "... Delivering capability to the fleet is one of the key tenets of FORCENET and SEA POWER 21. ...
 - The way ahead for NKO is to get capability afloat so that NKO is available to our sailors at sea....
 - It is expected that NKO will operate within the Distance Support servers on board ship. ...
 - ...making use of replication schemes and content based delivery architectures which pay close attention to available bandwidth."

"181408Z APR 03 COMNAVNETWARCOM NORFOLK VA"

Delivering the Sea Warrior Afloat

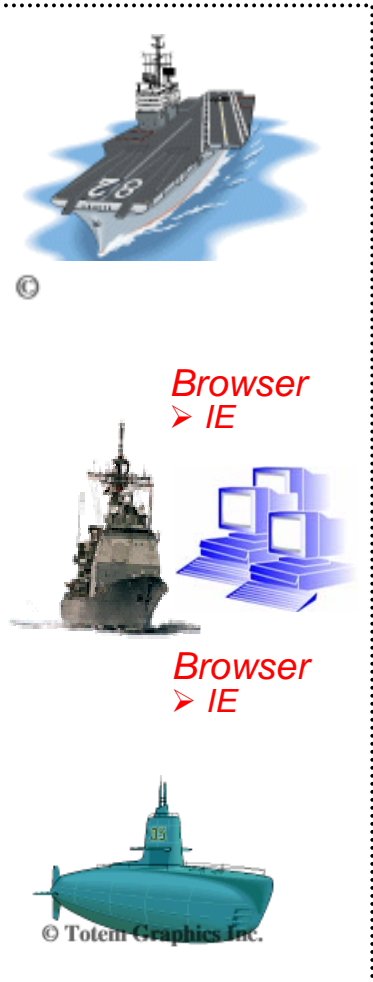
Challenge and The Way Ahead

- Today's bandwidth designed to support tactical requirements
- Rapidly evolving non-tactical capability to the Warfighter afloat.
- Platform resident, content based delivery architectures and replication schemes for disconnected ops which pay close attention to available bandwidth.
- Distance Support v2.0 is the FORCEnet approved application for "Disconnected Ops"

More than how much Bandwidth we have, is how well we manage it!

Products and Services

BG Network



Ashore Support Community

Support Requests

Email - Phone - Naval Message

Customer Support

Navy Integrated Call Center/
Global Distance Support Center
(24/7/365)

DS 1.5 (Web)

Internet



Functional Information

- Maintenance
- Technical
- Logistics
- Ordnance
- Personnel
- Spiritual
- Supply
- IT
- Medical
- Training

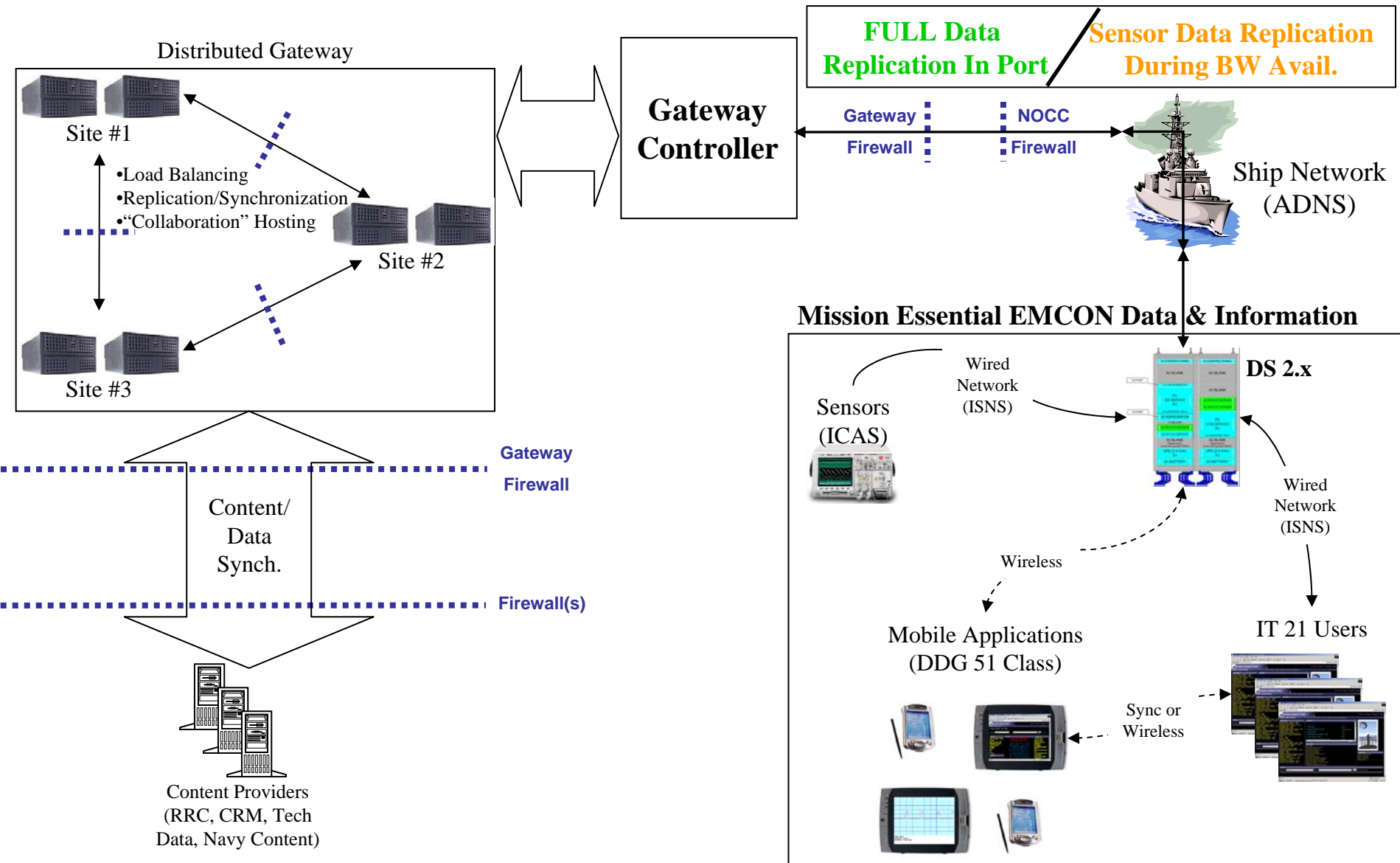
Organizations

- Chaplain
- SPAWAR
- BuMed
- BuPers
- NAVSUP
- NAVSEA
- NAVAIR
- Warfare Centers
- NPDC

*DS 2.0
(Platform Resident)*

DS 2.0 enables Sea Warrior and much more

Disconnected OPS / Replication Architecture



Integrated Tier Structure

Upper Tier Shore Infrastructure

Content
Providers

NKO

NPDC
NAVAL PERSONNEL DEVELOPMENT COMMAND

**DS Replication/
Synchronization
Service**

**Knowledge/ Distributed
Gateway #N**

Amendment Server #1

Amendment Server #3

Amendment Server #2

Amendment Server #5

Amendment Server #N'

Amendment Server #4

Ship Infrastructure

Mid-Tier

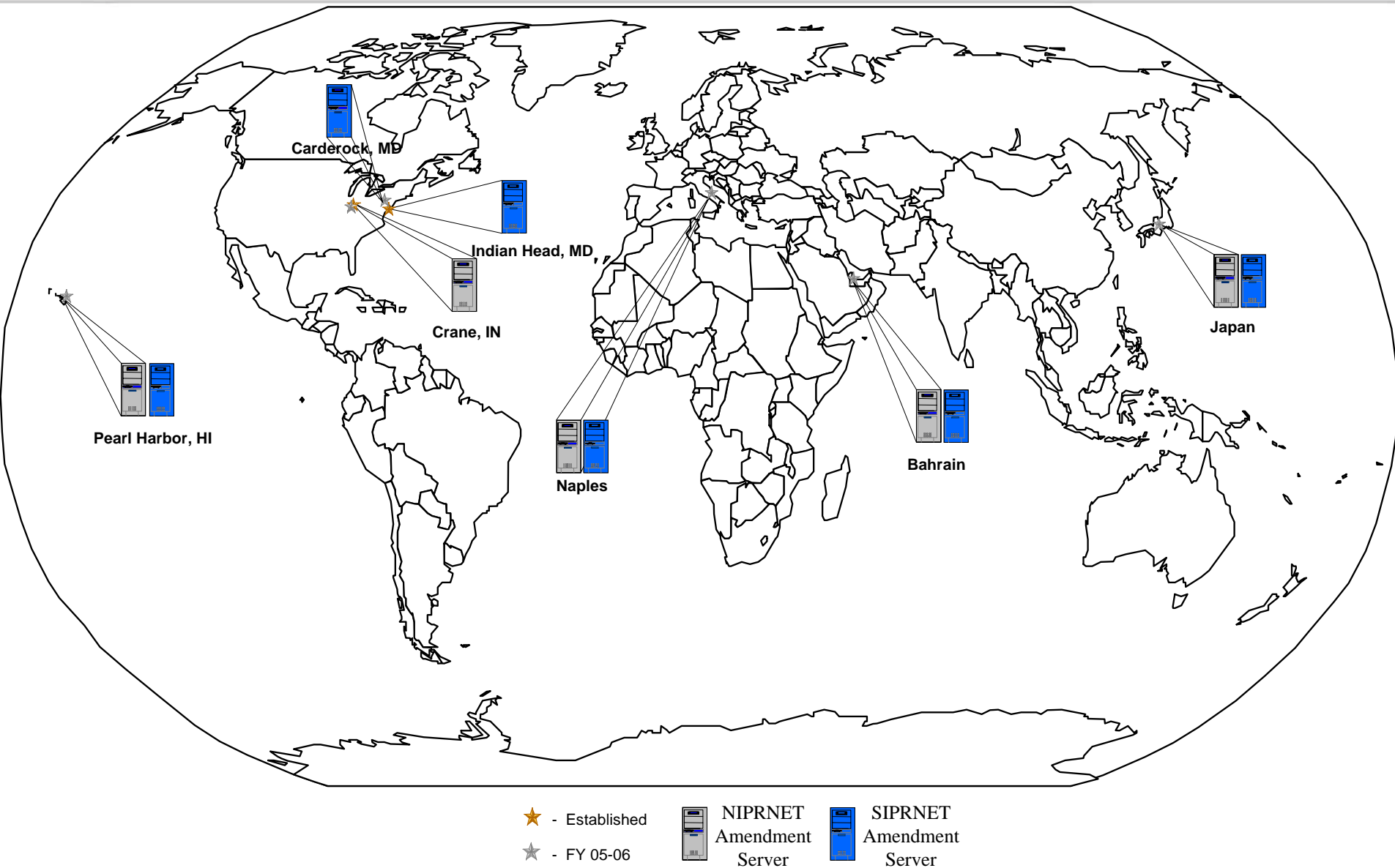
**Distance Support
v2.0 Server**

DS Replication/Synchronization Service

User Interface/Applications

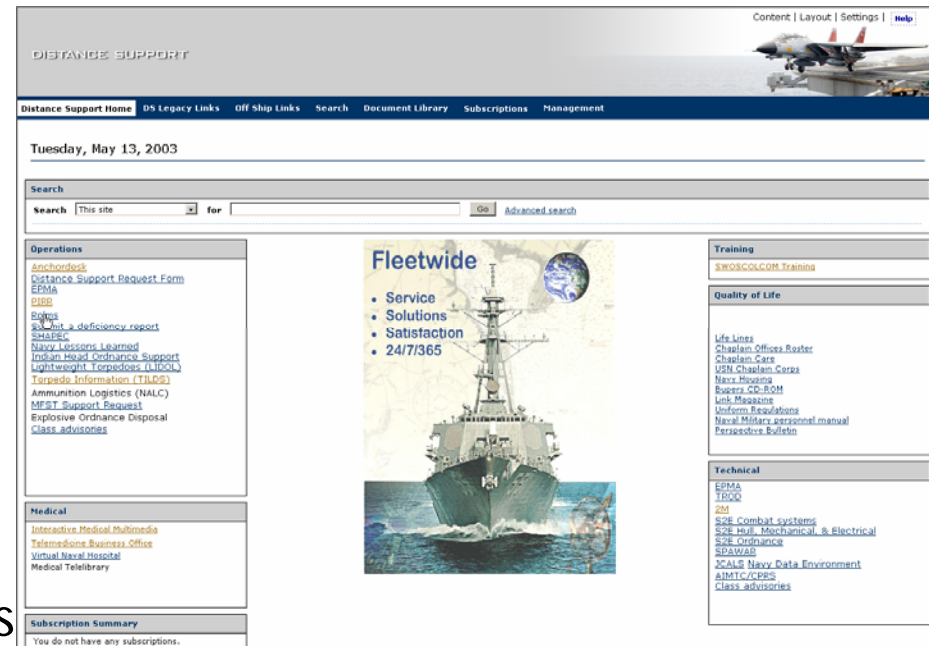


Global Replication Infrastructure



Distance Support 2.0

- Shipboard Resident Content
 - Technical
 - Training
 - Quality of Life
- Tools
 - Task Aids
 - Collaboration
 - Data (Maintenance Sensor) Transportation
- Infrastructure
 - Wireless Capable Applications
 - Optimized Data Replication
 - "Epsilon" Compression



Characteristics

- Ship Initiated and Controlled External Communication
 - Ship to Shore
 - Shore to Ship
- Respects Bandwidth Availability
- Content Replication Does Not Require Live Ship to Shore Connection
- Supports “Distance Support” Business Rules
 - Content Distribution
 - Business Processes

Sample Screenshots



SAILOR TO ENGINEER



Email

NAVSEA
NAVAL SEA SYSTEMS COMMAND

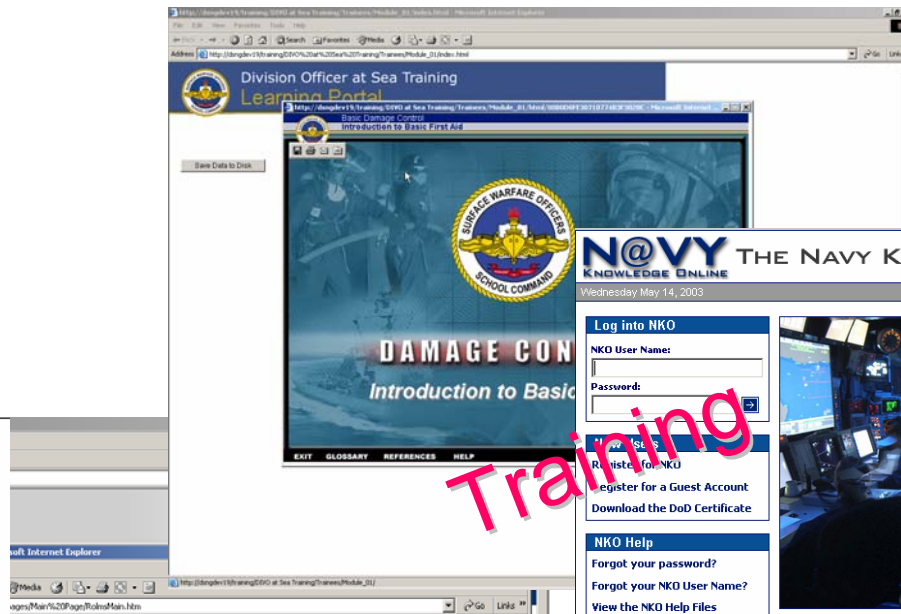
Request Access

About Us

FLEET SUPPORT

Access is currently restricted to active US Navy Military and Civilian Employees only

WARNING: This is a DOD computer system. Certain restrictions apply.
Use constitutes consent to monitoring.



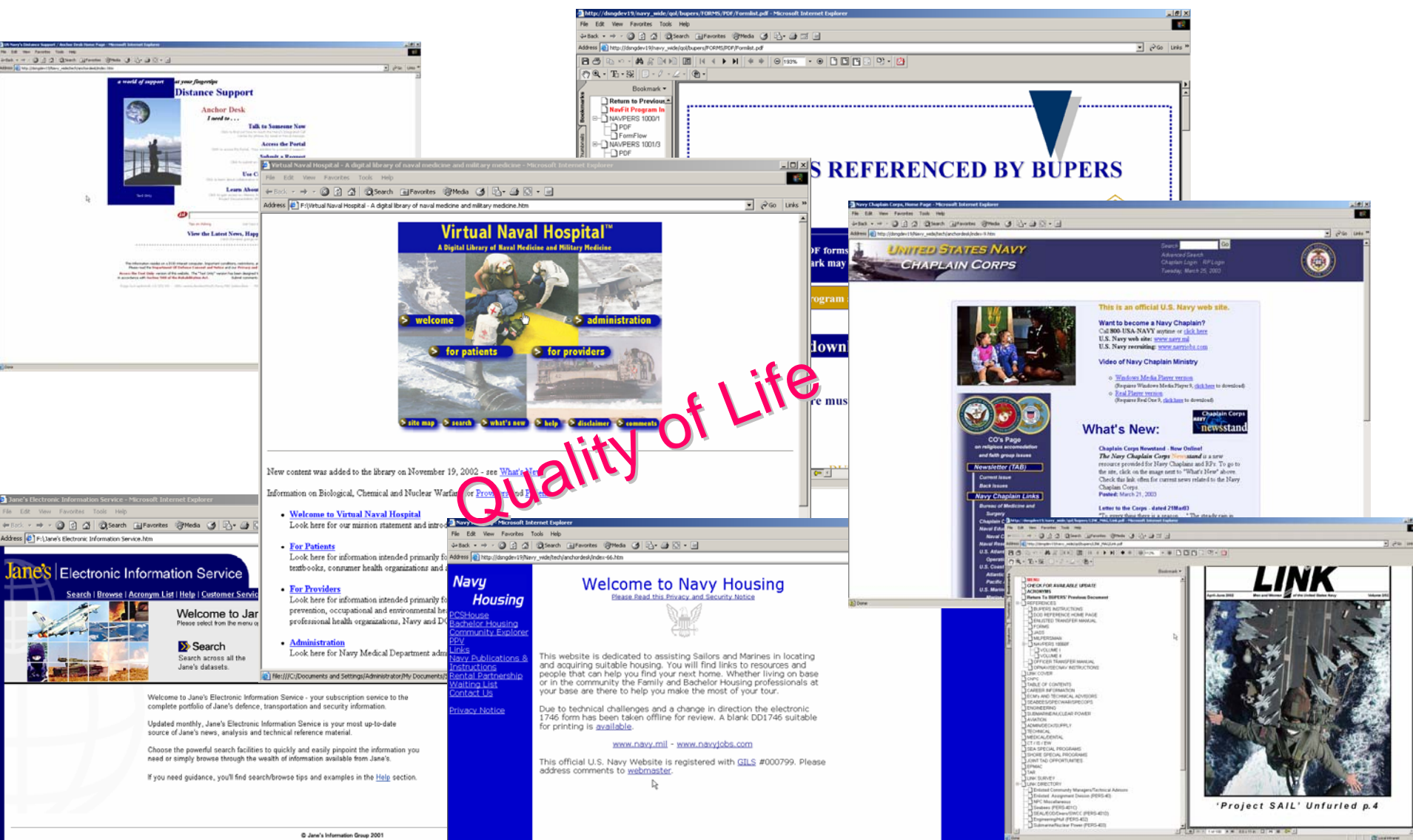
ROLMS DEPARTMENT OF DEFENSE
WARNING

19401A0001
D108023200108012
200544
C 3 1170 LOP 3 1170 LOP 5 0000
-90L010-027A
D108023200108012
15C445
-30-21XA
D108023200108012
908270
-79C001-008
D108023200108012
908285
C-4-9 BWV76300B-005

P121YUW RULSAB1940 2151732-UUUD--BRMCSU.
ZNR UUUUU
P 031940Z AUG 01
FM NAVJAGLOOCCN MECHANICSBURG PA//4315//
TO AIG 7613
USS RAVEN
SURFCEMATSUSCEN HALLOPS ISLAND VA
PRECOMINIT IWO JIMA
JALCO LOGISTICS
EOMU TWELVE TWO SIX
KODRU TWELVE DET TWO SIX
DOL FT POLK LA//AFEX-DL//
CO FOURTH MAW
ANMC ANNISTON AL//SRABG-AN-SUR//
COASD HITHON TEN
PRECOMINIT RONALD REAGAN
AIRTEVON HIDE CHINA LAKE CA//ORD//
NMLA SEVEN SEVEN FIVE DET ALFA//ORD//



Sample Screenshots (cont.)



Shipboard Resident Content

US Navy's Distance Support / Anchor Desk Home Page - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media

Address http://ds2-ffg55/navywide/legacy%20links/web_slice/anchordesk/index.htm

Anchor Desk Home
ChaplainCare Home
Daily Devotions
Personal Prayer
Self-help
About Various Faiths
Weddings / Pre-Marriage / Marriage
CREDO Centers of Excellence
Community Service Projects
Family Support
Navy-Marine Corps Relief Society
American Red Cross
USMC
USCG
Chaplain Roster
Military Personnel Locator
Photos Of Our Troops

a world of support at your
Dist



Text Only

Start Tomcat

ChaplainCare Web Page - Microsoft Internet Explorer




File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media

Address http://ds2-ffg55/navywide/legacy%20links/web_slice/anchordesk/Chaplaincare/www.chaplaincare.navy.mil/index4a4b.htm

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DEPARTMENT OF DEFENSE WARNING



ChaplainCare

Distance Support Home - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites Media

Address <http://ds2-ffg55/DS/>

Content | Layout | Settings |

DISTANCE SUPPORT

Distance Support Home Off Ship Links Search Document Library Subscriptions Management

Search for [Advanced search](#)

Operations ?

- [Anchordesk](#)
- [Distance Support Request Form](#)
- [EPMA](#)
- [PIRR](#)
- [RoIMS](#)
- [Submit a deficiency report](#)
- [SHAPEC](#)
- [Navy Lessons Learned](#)
- [Indian Head Ordnance Support](#)
- [Lightweight Torpedoes \(LIDOL\)](#)
- [Torpedo Information \(TILDS\)](#)
- [Ammunition Logistics \(NALC\)](#)
- [MFST Support Request](#)
- [Explosive Ordnance Disposal](#)
- [Class advisories](#)

Fleetwide

- Service
- Solutions
- Satisfaction
- 24/7/365



Quality of Life

- [Life Lines](#)
- [Chaplain Offices Roster](#)
- [Chaplain Care](#)
- [USN Chaplain Corps](#)
- [Navy Housing](#)
- [Bupers CD-ROM](#)
- [Link/Perspective Magazine](#)
- [Uniform Regulations](#)
- [Naval Military personnel manual](#)
- [Bupers Web](#)
- [Detailer Info](#)

Technical

- [EPMA](#)
- [TROD](#)
- [2M](#)

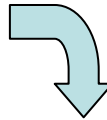
Shipboard Resident Content

The background of the slide is a solid blue color with a white grid pattern. In the top right corner, there is a faint, circular seal of the United States Navy. The central part of the slide features a white-bordered graphic with a blue background. On the left side of this graphic is a close-up of a sailor in a white uniform and cap, looking to the right with his hand to his forehead. The text "Navy Information/Application Product Suite (NIAPS)" is overlaid in white. The background of the graphic shows a map of the Pacific Ocean with several naval ships sailing. On the right side of the graphic is a large, detailed image of a modern naval ship, possibly an Arleigh Burke-class destroyer, with an American flag flying from its mast. The bottom of the slide shows a blue ocean with several smaller naval ships sailing in a formation.

Navy Information/Application Product Suite (NIAPS)

Technical Concept

Deckplate Sailor



Shipboard Infrastructure

IT-21

NTCSS

NTDPS

ADNS

Wireless

...

NIAPS

ATIS

SKED

SOMS

OMMS-NG

DS 1.x

DS 2.0 Application

TDKM

ICAS

RTASS

NKO

TLMS

...

ePMA

Navy Infrastructure

SAT-COM

NOCC

FORCEnet

NMCI

GIG

...

Shore Infrastructure

NICC

Collaboration Tools

Content Providers

...

NIAPS Applications

- Advanced Technical Information Support (ATIS)
- Distance Support (DS)
- Navy Knowledge Online (NKO)
- Shift Operations Management System (SOMS)
- Preventative Maintenance Schedule (PMS) Scheduler (SKED)
- Technical Library Management System (TLMS)
- Portable Maintenance Assistance (Web-Enabled) (ePMA)
- Technical Data Knowledge Management (TDKM)
- Submarine Non-Tactical Application Delivery Interface System (SNADIS)
- Total Ship Information Management System (TSIMS)
- Operational Maintenance Management System-Next Generation Application Program Interface (OMMS-NG API)

Milestones

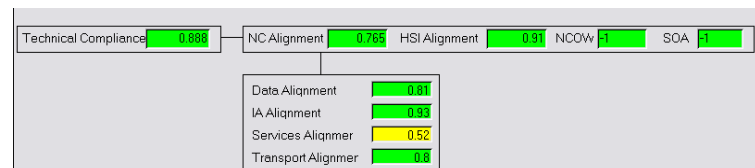
- Certifications/Approvals:
 - SPAWAR NCR/SSIL Certified: SSIL-03-0052
 - NETWARCOM ATO: 29 Nov 04 (3 Year)
 - FFC N6 Approval: Naval Message 271218Z Feb 04
 - FORCEnet Implementation:



Technical Mtg Results



- Initial FIBL Results DS2.0 (as-is) showed good alignment



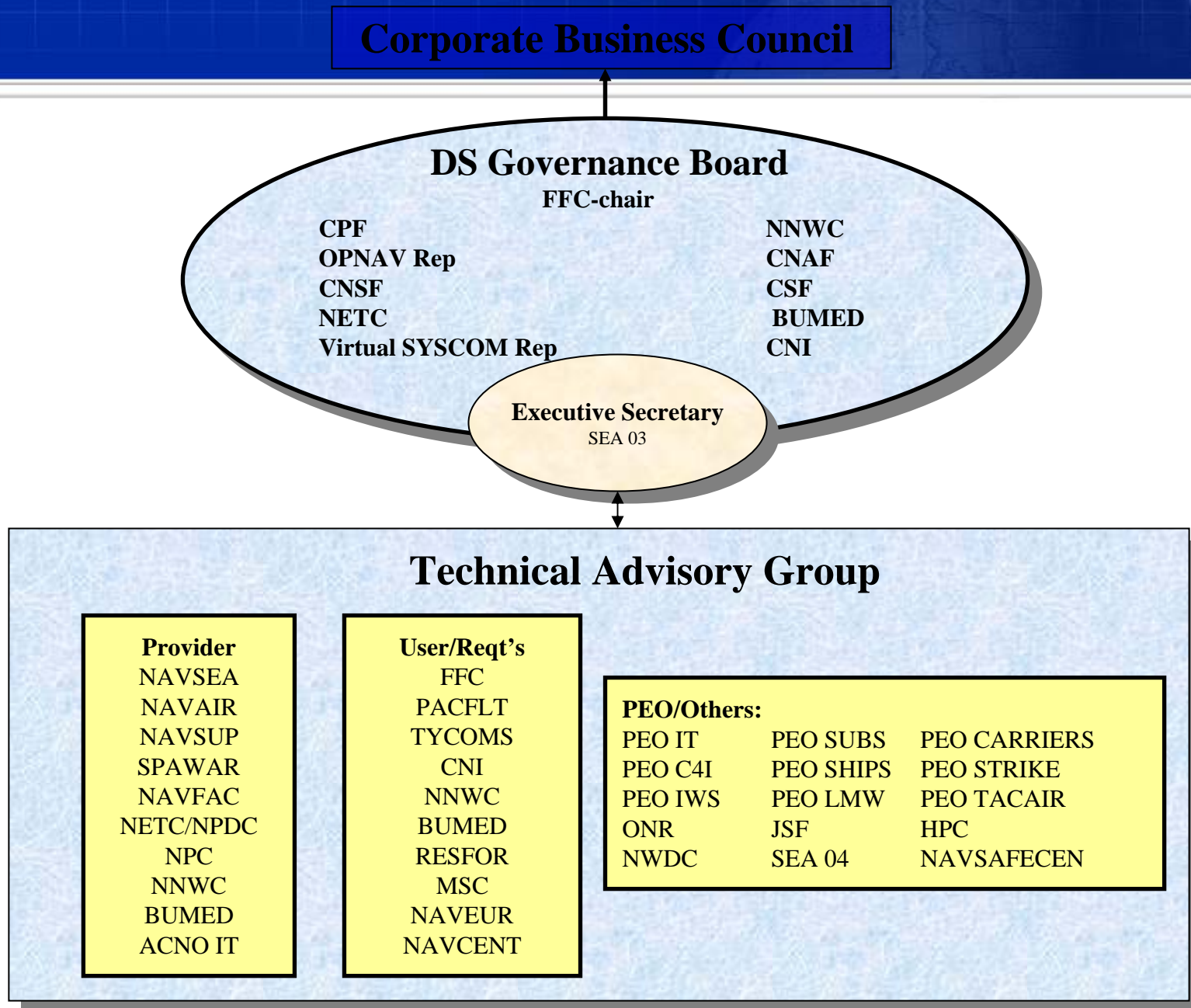


- Questions ???

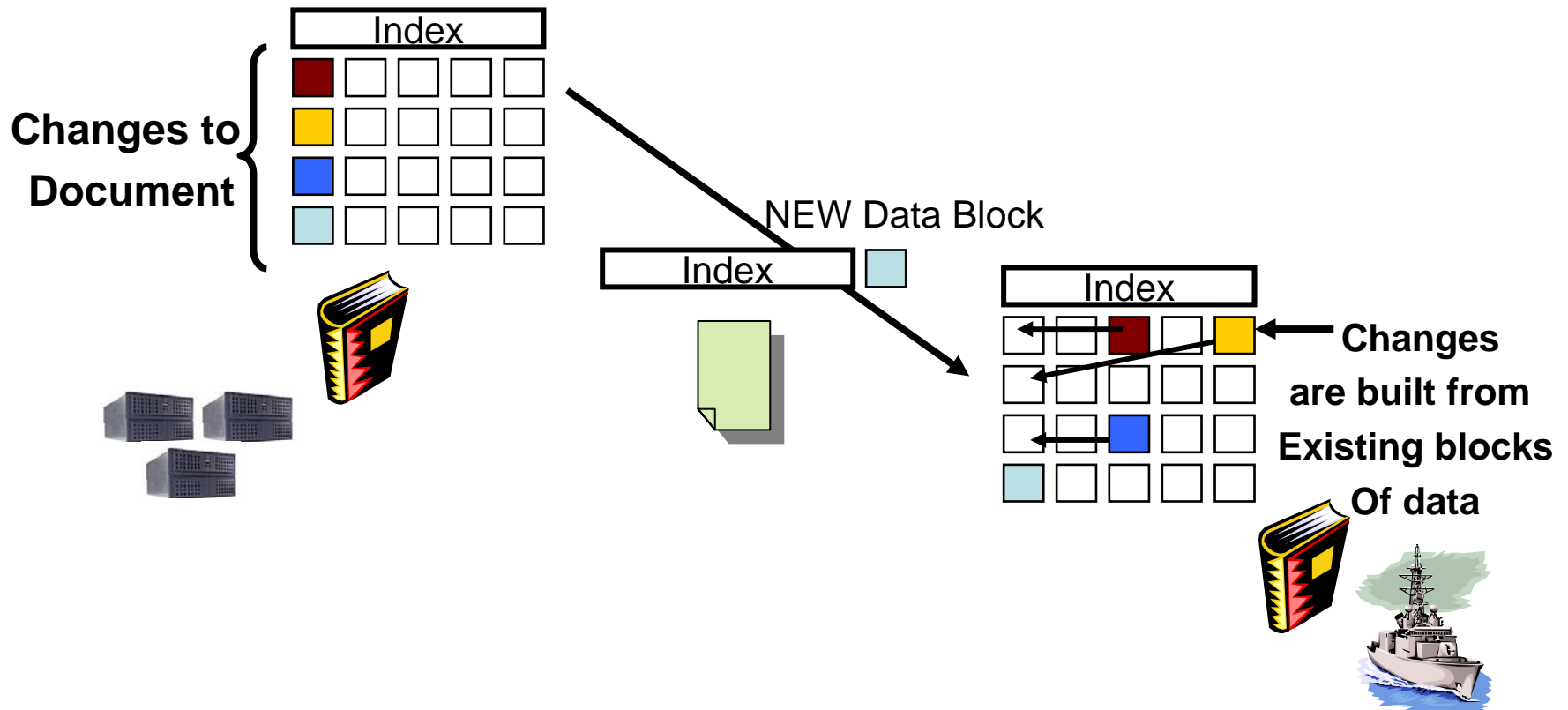
Backup



DS Governance

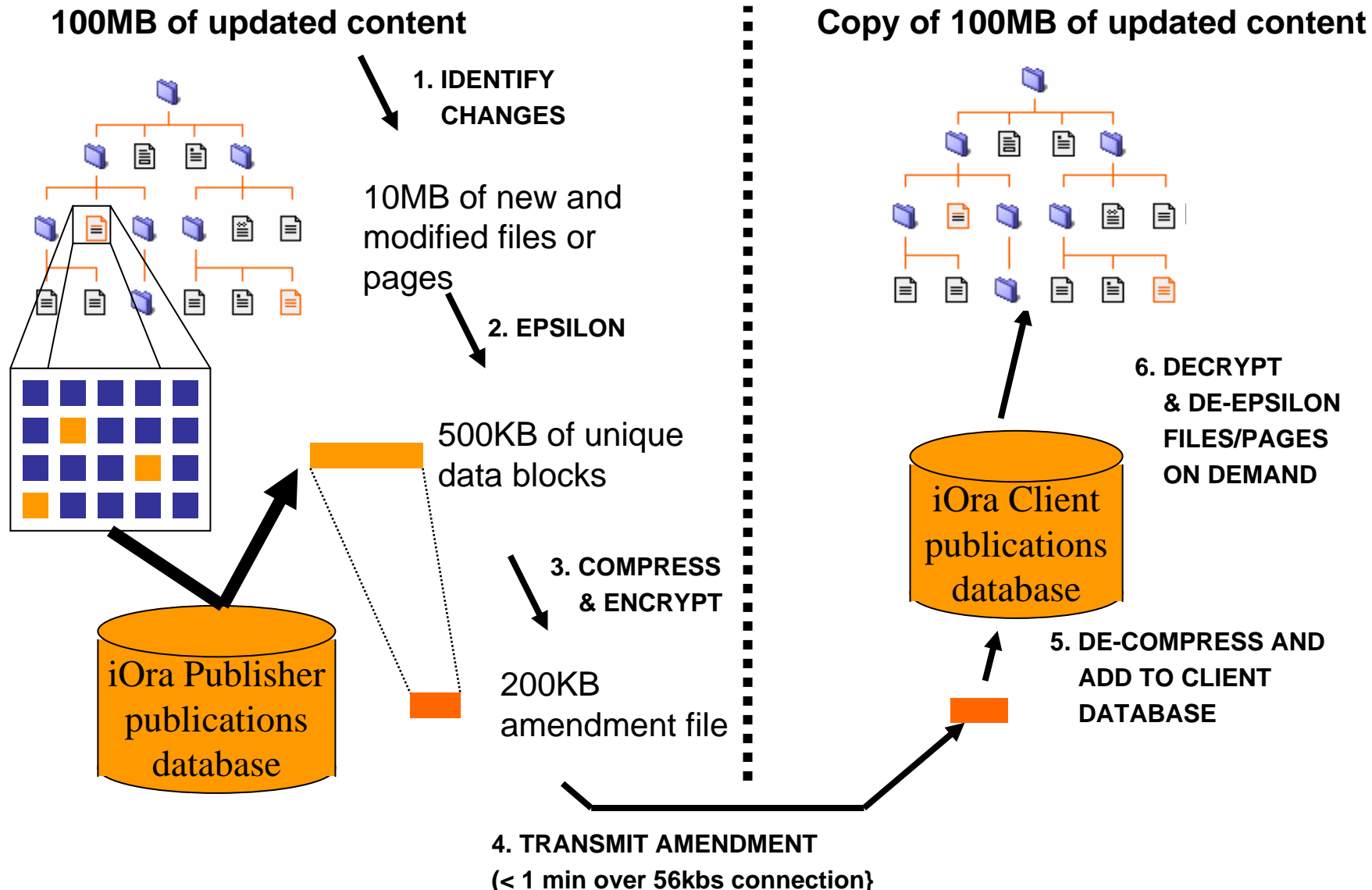


iOra Epsilon Update/Synchronization



**Document Changes are built from an Index,
NEW blocks of data and Existing blocks of Data!**

Example of how Epsilon Works

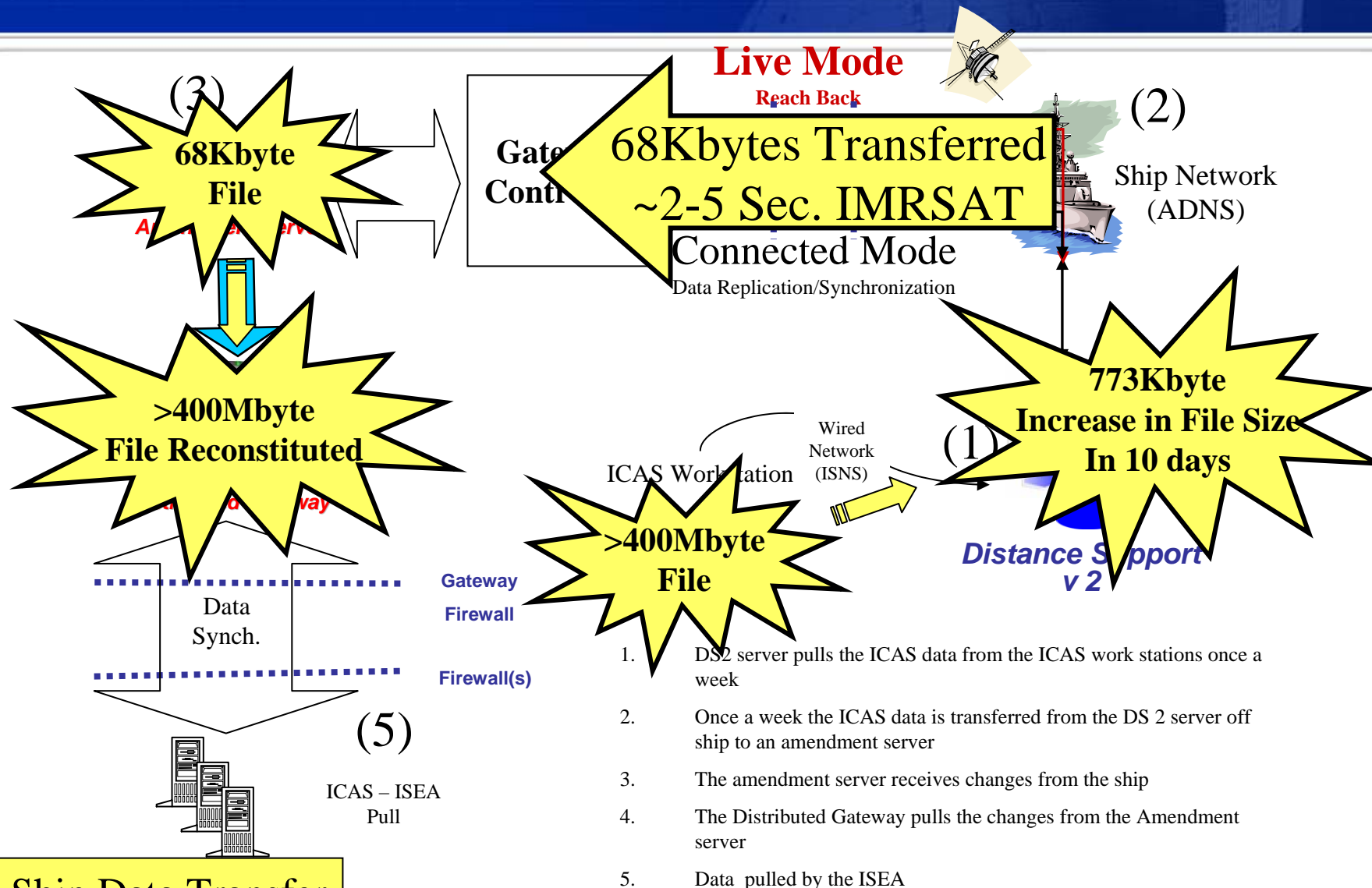


Distance Support version 2

ICAS

- DS 2 is the Conduit for Automatically Transporting ICAS Sensor Data from Ship to Shore
 - DS 2 Compression and Replication Results in ~70kb file per week
 - Requires ICAS Workstation Connected to ISNS LAN
 - DDG Configuration
 - Upgrade Required on non-DDG Ships

ICAS Data Flow



Real Ship Data Transfer
30 Dec - 8 Jan. 04

Distance Support 2

Content Size

- ATIS Tech Manuals 250 Gb
- Training 100 Gb
 - NKO Afloat, NETg, etc.
- Navy Wide Content 75 Gb
 - Anchordesk legacy links, medical, QOL, operations, etc.
- SKED 15 GB